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| <p>(21) International Application Number: PCT/SE98/01935</p> <p>(22) International Filing Date: 27 October 1998 (27.10.98)</p> <p>(30) Priority Data: 9703944-0 29 October 1997 (29.10.97) SE</p> <p>(71) Applicant: TELEFONAKTIEBOLAGET LM ERICSSON (publ) [SE/SE]; S-126 25 Stockholm (SE).</p> <p>(72) Inventor: GRENABO, Håkan; Wahlbergsgatan 2, S-416 72 Göteborg (SE).</p> <p>(74) Agents: BERGENTALL, Annika et al.; Cegumark AB, P.O. Box 53047, S-400 14 Göteborg (SE).</p> | | <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 15 July 1999 (15.07.99)</p> |

The diagram shows a PLL system with two PLLs (22 and 23) and a feedback loop. The reference signal (REF) is input to PLL 22 (21) and PLL 23 (23). PLL 22 outputs a signal (22) which is multiplied (25) by the output of PLL 23 (23). The output of the multiplier (25) is the input to the PLL system (IN 40). The output of the PLL system (OUT 40) is fed back through a feedback loop (43) to the input of the PLL system (IN 40). The feedback loop includes a summing junction (44) and a low-pass filter (LP FILTER 43). The output of the summing junction (44) is the input to the PLL system (IN 40). The output of the PLL system (OUT 40) is fed back through a feedback loop (43) to the input of the PLL system (IN 40). The feedback loop includes a summing junction (44) and a low-pass filter (LP FILTER 43). The output of the summing junction (44) is the input to the PLL system (IN 40). The output of the PLL system (OUT 40) is fed back through a feedback loop (43) to the input of the PLL system (IN 40).

The present invention relates to an arrangement (100) and a method respectively for suppressing clock overtones generated in a receiving arrangement of a radio communication system which receives signals within at least one frequency band and wherein the receiving arrangement comprises a number of oscillators including local oscillators and digital clocking means. The arrangement (100) comprises a phase locking arrangement (20) which includes a number of phase locking means (22; 23) for locking the oscillators in relation to each other so that all clock overtone frequencies become co-located and well defined within the frequency band(s). The arrangement further comprises a filtering arrangement (40) for filtering out said clock overtones, thus producing an output signal (I OUT/40) which is substantially free from clock overtones.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 98/01935

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: H04B 1/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC6: H04B, H03H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPIL, EDOC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| A | WO 9531860 A1 (ANALOG DEVICES, INC.), 23 November 1995 (23.11.95), page 5, line 16 - line 27, abstract -- ----- | 1-22 |

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents

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INTERNATIONAL SEARCH REPORT

Information on patent family members

07/04/99

International application No.

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